

# California High-Speed Train Project



## TECHNICAL MEMORANDUM

### FRA Drawing Review

### TM 100.03

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Revision	Date	Description
0	16 May 11	Initial Release, R0

Note: Signatures apply for the latest technical memorandum revision as noted above

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## ABSTRACT

This memorandum has been prepared to provide a procedure for the distribution and review of 15% and 30% Design Submittals (drawings) to the Federal Railroad Administration (FRA) for their review and comment.

The purpose of the FRA review is to support release of the special conditions within the grant agreement (see pages 3-9 of the NGA) between the FRA and California High-Speed Rail Authority (Authority). While the release will likely come in the form of a letter, a review and acceptance of the design submittals is required to support the release.

The FRA review will be conducted at the Draft 15% and Draft 30% Design Submittal stages of completion following the procedures in TM 0.7 for the 15% Design Submittals, to the extent necessary and practical. Review procedures will be confirmed with FRA for 30% Design Review when the review protocol document is available for discussion.

Formal documentation of the review process is accomplished with a ProjectSolve2 based system called Review Manager. The specific review activities are further described in TM 0.7 Design Submittal Protocol. An illustrative Comment/Response form is attached for purposes of this document regarding FRA review of the 15% Design Submittals. While the form is used to support the process, it does not represent the formal record.



## 1.0 INTRODUCTION

### 1.1 PURPOSE OF TECHNICAL MEMORANDUM

This memorandum has been prepared to provide a procedure for the distribution and review of 15% and 30% Design Submittals (drawings) to the Federal Railroad Administration (FRA) for their review and comment.

## 2.0 DEFINITION OF TECHNICAL TOPIC

Not applicable.

## 3.0 ASSESSMENT / ANALYSIS

### 3.1 BACKGROUND

The review process for the CHSTP 15% Design Submittals prepared by the Regional Consultants is provided in TM 0.7 Design Submittal and Review Protocol - In-progress and Draft 15% Design Submittals. A separate Technical Memorandum is under development for review of 30% Design submittals and is anticipated to adhere to the basic principles as TM 0.7.

The protocol identifies three submittals at 15% Design which includes an In-Progress submittal, Draft submittal, and Record Set submittal.

- The In-progress submittal is intended as a first formal review of the proposed alignments and engineering approaches to ensure compliance with applicable CHSTP design criteria and for overall system performance and safety.
- The Draft submittal is intended to incorporate review comments as resolved by the Regional Managers, Regional Consultants, and CHSTP Engineering team, and is then submitted for confirmation and other revisions to the alignments based on additional information.
- The Record Set submittal is intended to be the formal record of alignments in support of the environmental review process. The Record Set is expected to incorporate review comments as resolved by the Regional Managers, Regional Consultants, and CHSTP Engineering team

The In-progress Design Submittal Reviews will correspond to In-progress Design Submittals at major stages of completion by design element, as identified in Table 1. In-progress Design Submittals may be combined as appropriate. The Draft 15% Design Submittal Review will be performed on a Draft 15% Design Submittal, which will include all design elements and incorporate and/or address all comments received from the In-progress Design Submittal Reviews. This review will also consider system integration, including both boundary interface conditions and design integration within the segment. A Record Set 15% Design Submittal will represent the final product for the 15% Design effort and will not be subject to review and comment by the PMT.

**Table 1: *In-progress and Draft 15% Design Submittals for Review***

Submittal	Design Element
1	Alignment and Typical Sections
2	Structures, Viaducts, Tunnels
3	Stations, Maintenance Facilities including Storage
4	Traction Power
5	Major Utility Relocations, Maintenance of Way Facilities and Trackside Access, Other (to be determined)
6	Draft 15% Design



Formal documentation of the review process is accomplished with a ProjectSolve2 based system called Review Manager. The specific review activities are further described in TM 0.7 Design Submittal Protocol. An illustrative Comment/Response form is attached for purposes of this document regarding FRA review of the 15% Design Submittals. While the form is used to support the process, it does not represent the formal record.

The review process provides flexibility for reviewers to comment on issues that are considered Mandatory, Recommended or Information. The PMT Regional Management Team is responsible to resolve any coded "1" (Mandatory) comments with a response coded "D" within twenty (20) working days of response. Where "D" is accepted with explanation, the Reviewer is to document acceptance of response with initials and date in the "Sign-Off" field in Review Manager. Only Mandatory comments with a response code "D" requires sign-off. Where the Regional Consultant disagrees with comments coded as "2" (Recommended) or "3" (Information), the Regional Manager Team should assess and resolve as appropriate, and Reviewer sign-off is not required.

### **3.2 FEDERAL RAILROAD ADMINISTRATION REVIEW**

The purpose of the FRA review is to support release of the special conditions within the grant agreement (see pages 3-9 of the NGA) between the FRA and the Authority. While the release will likely come in the form of a letter, a review and acceptance of the design submittals is required to support the release.

FRA reviews will be conducted by the following federal offices:

1. Office of Railroad Policy and Development  
Federal Railroad Administration  
1200 New Jersey Avenue SE  
Mail Stop 20  
Washington, DC 20590  
Phone: (202) 493-6381  
  
Environment and Systems Planning  
David Valenstein, Chief  
(Contact: Melissa Dumond, Environmental Protection Specialist)
2. Office of Railroad Safety  
US DOT/Volpe Center  
55 Broadway, Mail Stop RVT 63  
Cambridge, MA 02142  
Phone: (202) 493-6304  
  
Regulatory and Legislative Operations  
Robert Lauby, Deputy Associate Administrator  
(Contact: Fred Mottley, Senior Mechanical Engineer)



## **4.0 SUMMARY AND RECOMMENDATIONS**

### **4.1 RECOMMENDATIONS**

The FRA review will be conducted at the Draft 15% and Draft 30% Design Submittal stages of completion following the procedures in TM 0.7 for the 15% Design Submittals, to the extent necessary and practical. Review procedures will be confirmed with FRA for 30% Design Review when the review protocol document is available for discussion.


The FRA review process will be incorporated into TM 0.7 and the 30% Design Review Protocol document with the release of the next revisions. As part of the process, a total of two (2) hard copy sets of the draft design submittals will be provided to the FRA for their use. One set will be sent to each of the offices noted in Section 3.2.



## APPENDIX A

### Comment/Response Form

This form is provided for illustrative purposes. Formal comments and responses are to be made via Review Manager

Submittal Reviewer: <b>CHSTP ENGINEERING MANAGEMENT TEAM</b>				Date Comments Posted:										
Regional Consultant:				Date of Regional Consultant Submittal Meeting:										
Alignment Section:				Date Submittal Posted:										
Submittal Review Document:				Submittal Folder:										
<b>REFERENCE</b>				<b>COMMENT PRIORITY LEVEL</b>					<b>RESPONSE</b>					
				Comment Codes: <b>1</b> =Mandatory; <b>2</b> =Recommended; <b>3</b> =Information (no response required) Subsystem Codes: <b>INF</b> = Infrastructure; <b>SYS</b> = Systems; <b>MNT</b> = Maintenance; <b>OPS</b> = Operations; <b>RST</b> = Rolling Stock					Response Codes: <b>A</b> = Agree, will revise <b>D</b> = Disagree, see explanation/action taken <b>N</b> = Noted, no further action required (Not to be used for Mandatory comments)					
Mstr No.	Cmnt No.	Dwg/Sec or Doc	Page/Sht	Sht Type	Comment Code	Description	Subsystem Code	EMT Reviewer	Date	Response Code	Action Taken	Date	RC Verified by/date	EMT Sign-off (Ds only) by/date
	1													
	2													
	3													
	4													
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